

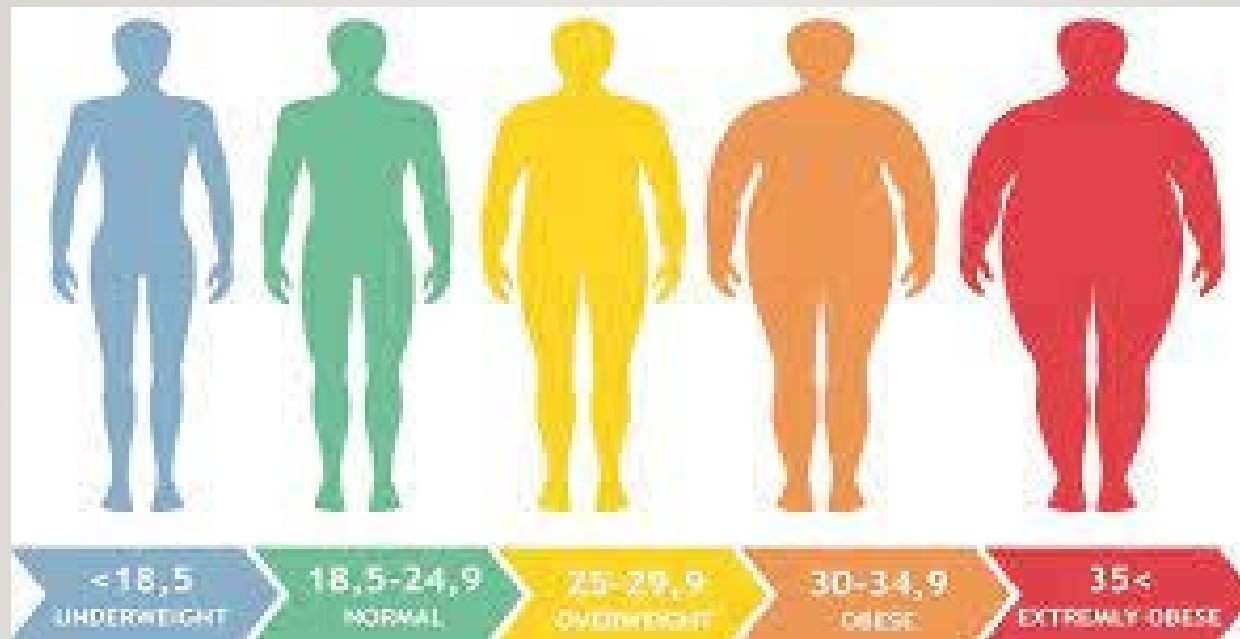
OBES VƏ DIABETİK AFSÜÇ XƏSTƏLƏRİNDƏ-MÜALİCƏDƏKİ HƏDƏFİMİZ VƏ TƏQİB STRATEGİYASI



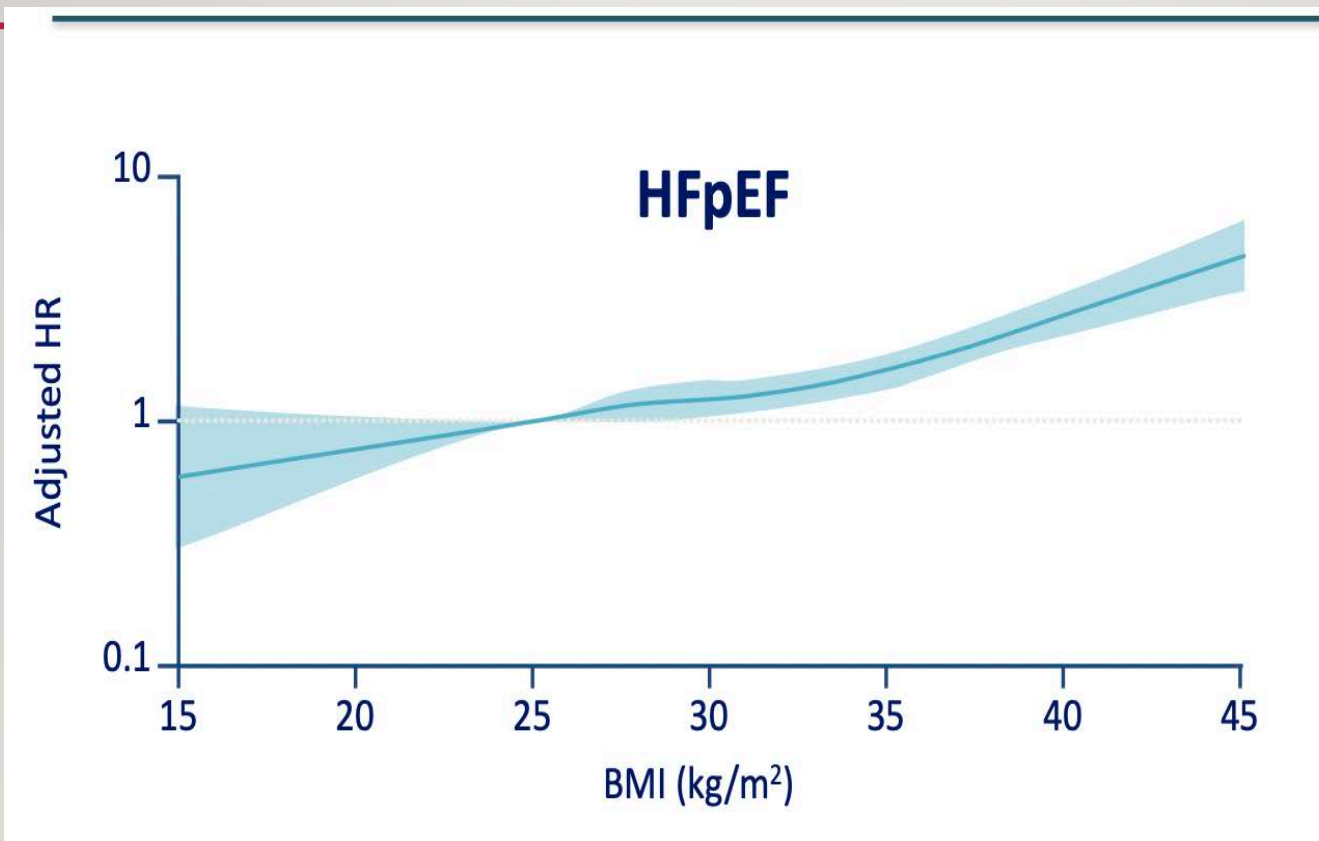
DR. ELNURƏ QARDAŞOVA

MƏRKƏZİ KLİNİKA

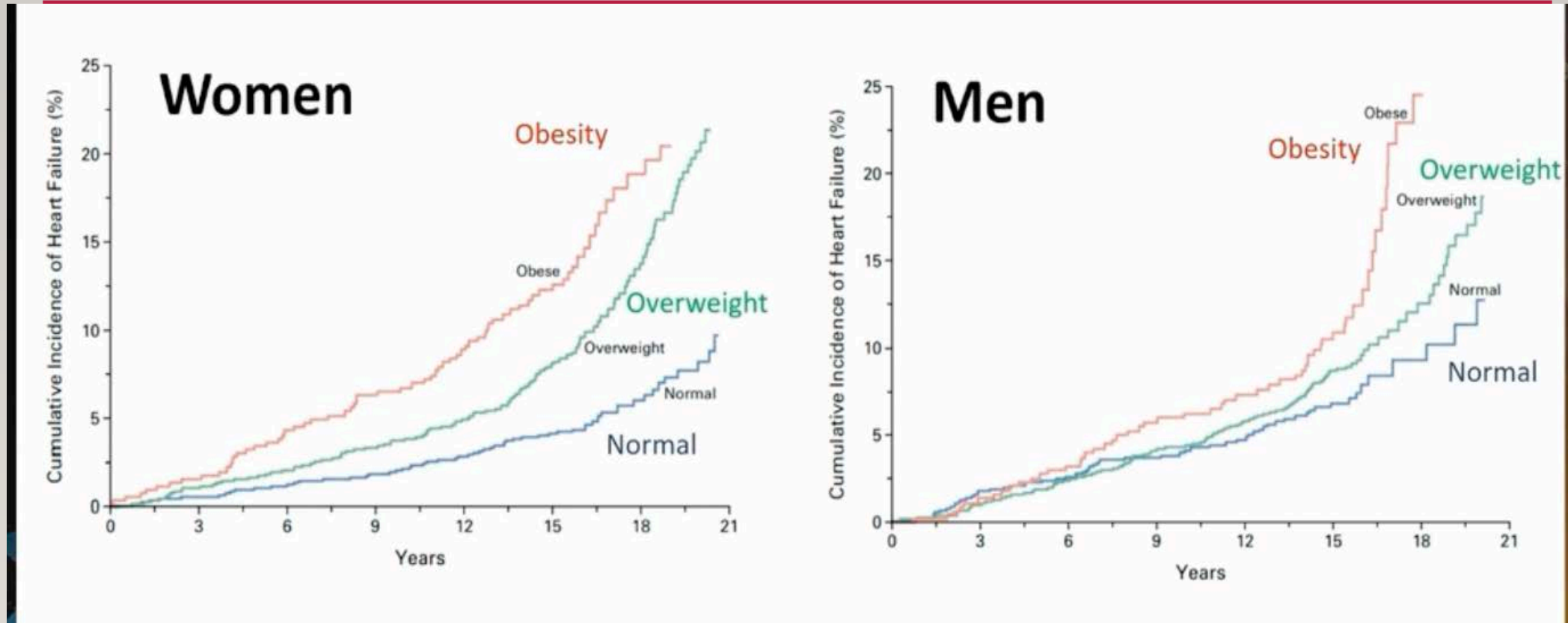
PIYLƏNMƏ (OBEZ)- SAĞLAMLIQ ÜÇÜN TƏHLÜKƏ YARADAN ANORMAL VƏ YA HƏDDİNDƏN ARTIQ YAĞ TOPLANMASI İLƏ XARAKTERİZƏ OLUNUR. BKİ-NƏ ƏSASƏN TƏSNİFATI VAR.
BKİ- ÇƏKİ/BOY²



BKI HFPEF-IN ƏSAS PREDIKTORUDUR.



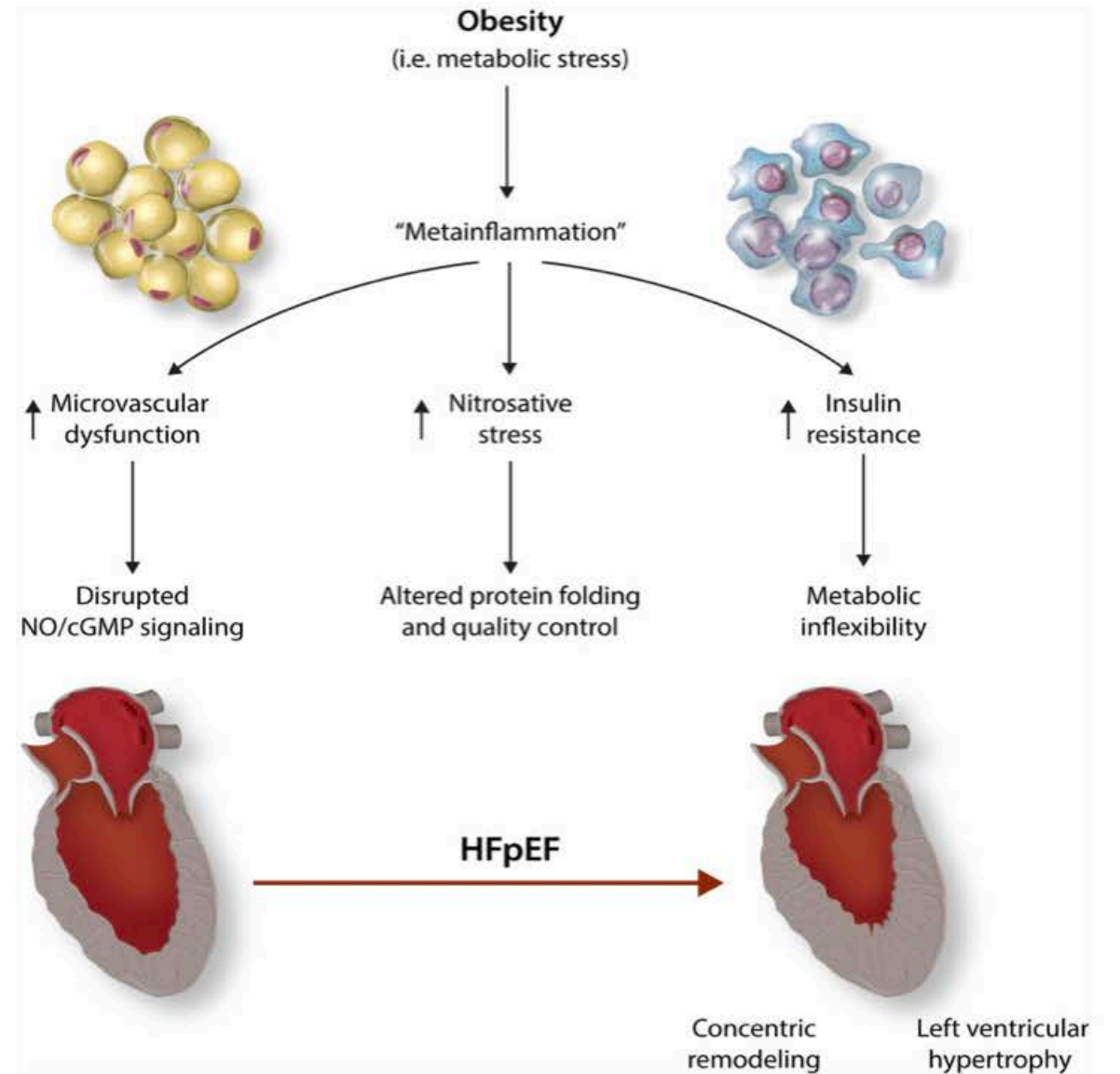
PIYLƏNMƏ VƏ ÜRƏK ÇATIŞMAZLIĞI RISKİ



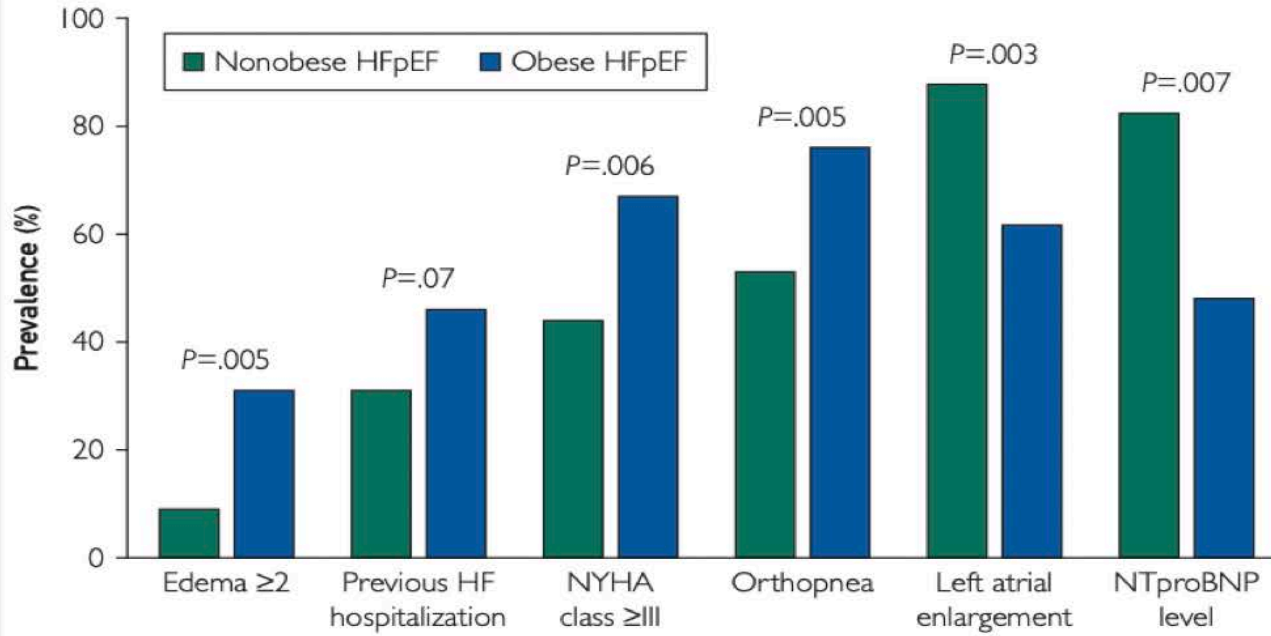
Metabolic inflammation in heart failure with preserved ejection fraction

Gabriele G. Schiattarella ^{1,2*}, Daniele Rodolico ³, and Joseph A. Hill ^{1,4}

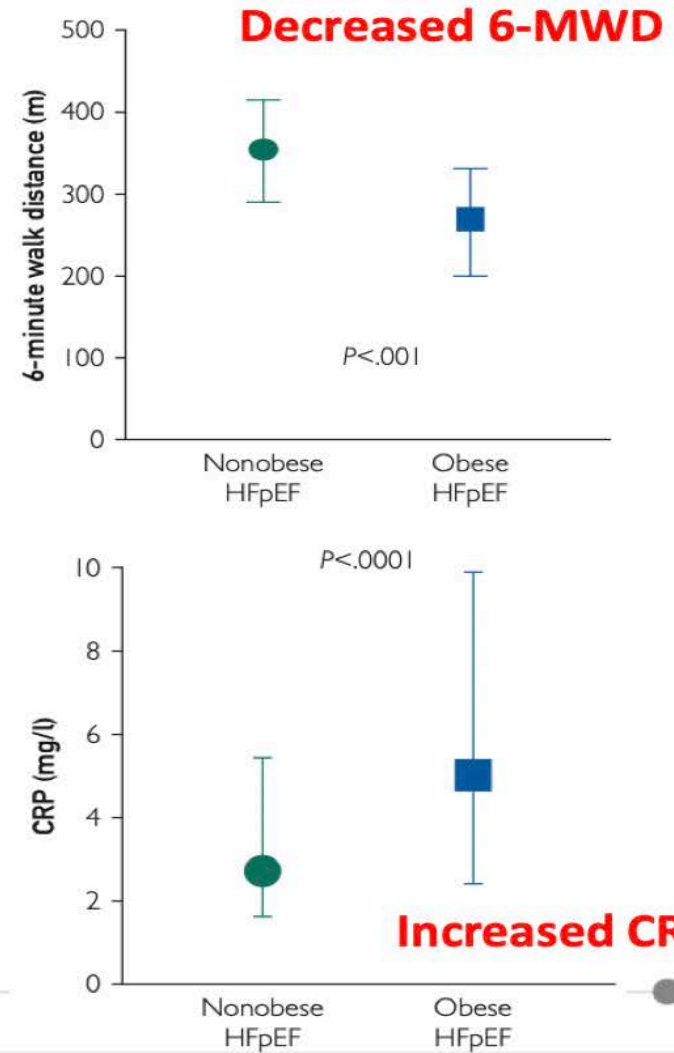
Down



Obese-HFpEF phenotype







More HF symptoms



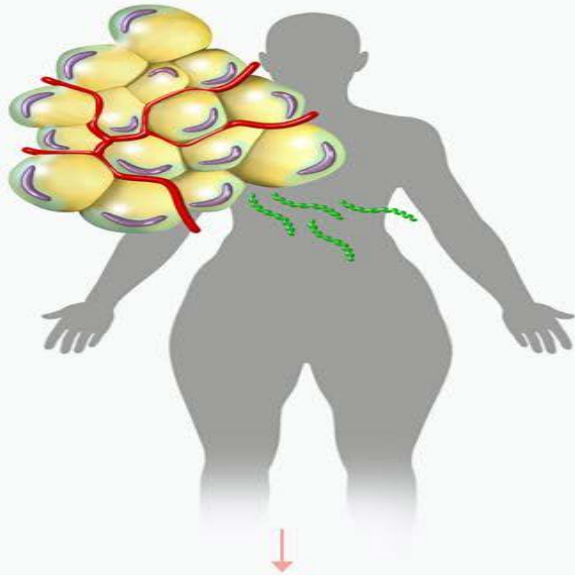
Decreased 6-MWD

Increased CRP

БКИ ТӘК КРИТЕРИЯ ОЛСА?

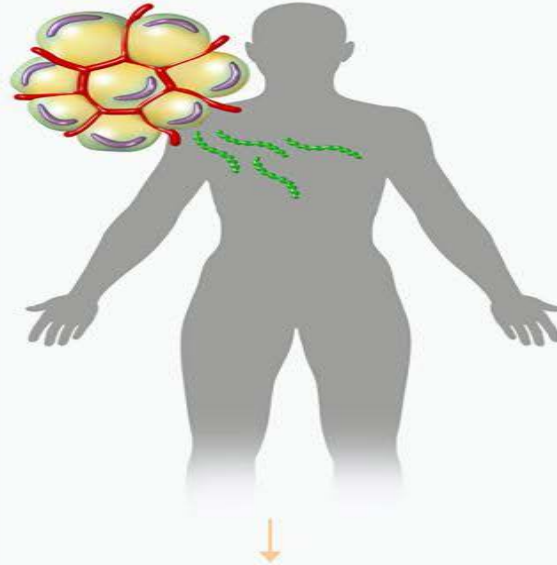
Body Composition and Obesity Phenotypes				
	Normal weight	Athlete	Nonsarcopenic Obese	Sarcopenic Obese
BMI (kg/m ²)	18.5-25	≥30	≥ 30	≥ 30
Fat Mass	Normal	Decreased	Increased	Increased
Lean Mass	Normal	Increased	Increased	Decreased
Cardio - Respiratory Fitness	Normal	Increased	<i>Mild Impairment?</i>	<i>Severe Impairment?</i>

Subcutaneous adipose hyperplasia



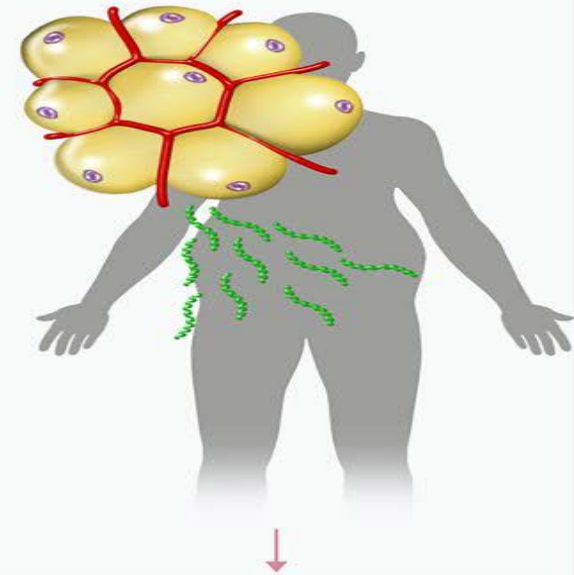
Normal FFA release
subcutaneous and
visceral fat

Normal adipose



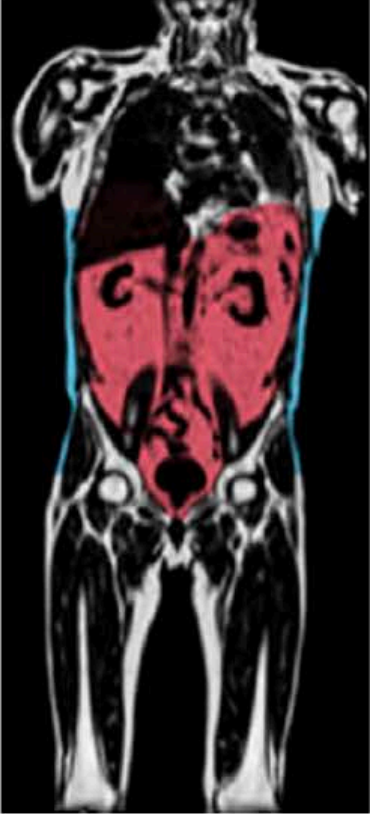
Normal FFA release
subcutaneous and
visceral fat

Subcutaneous adipose hypertrophy

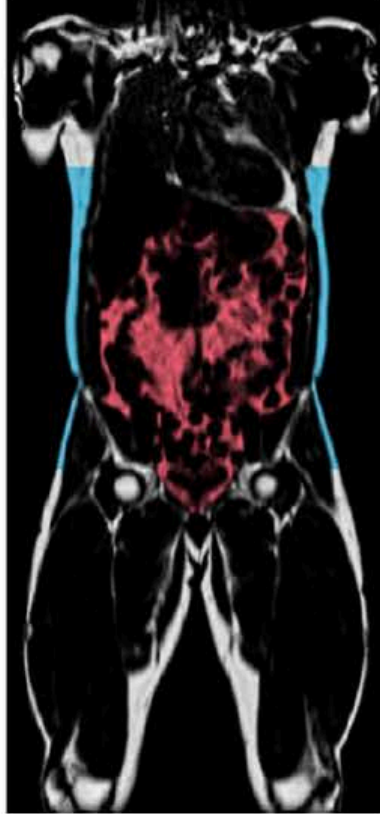


↑ FFA release
subcutaneous fat;
FFA from visceral fat
affects liver

63 yaş, kişi
BKİ-25 kg/m²
Visseral yağ 2.58 l/m²



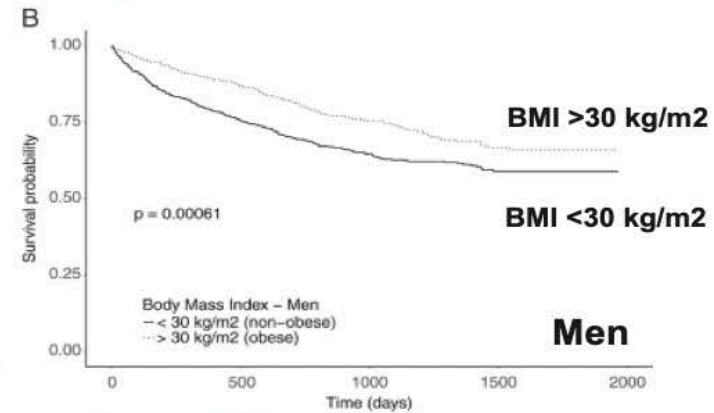
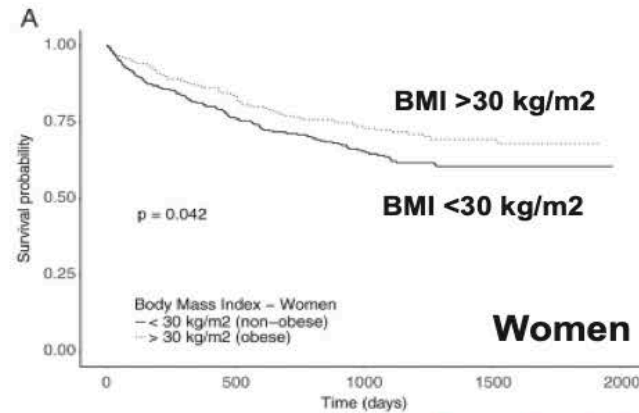
56 yaş, kişi
BKİ-30 kg/m²
Visseral yağ 0.88 l/m²



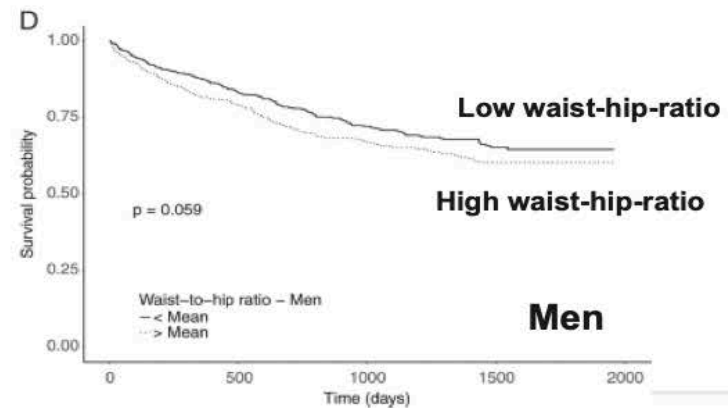
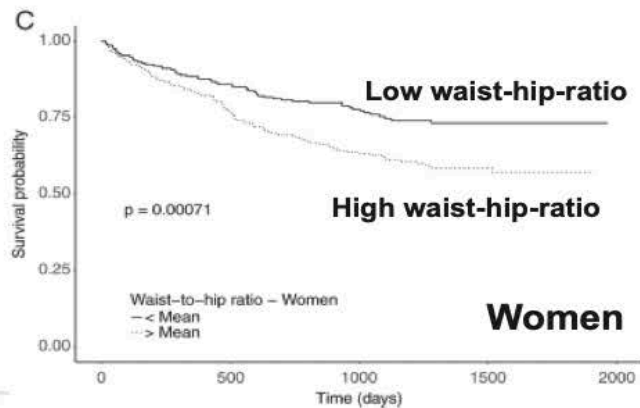
Metod	Klinik istifadəsi	Visseral yağ göstəricisi
BKİ	+++	+
Bel çevrəsi	+++	++
Bel- hündürlük nisbəti	++	++
Bel-qalça nisbəti	++	++
Hipertrigliseridemik bel	+++	++
KT	???	+++
MRT	???	+++
DXA	???	+++

ÜÇ-da Obez parodoksu: BKİ və Bel-qalça nisbəti

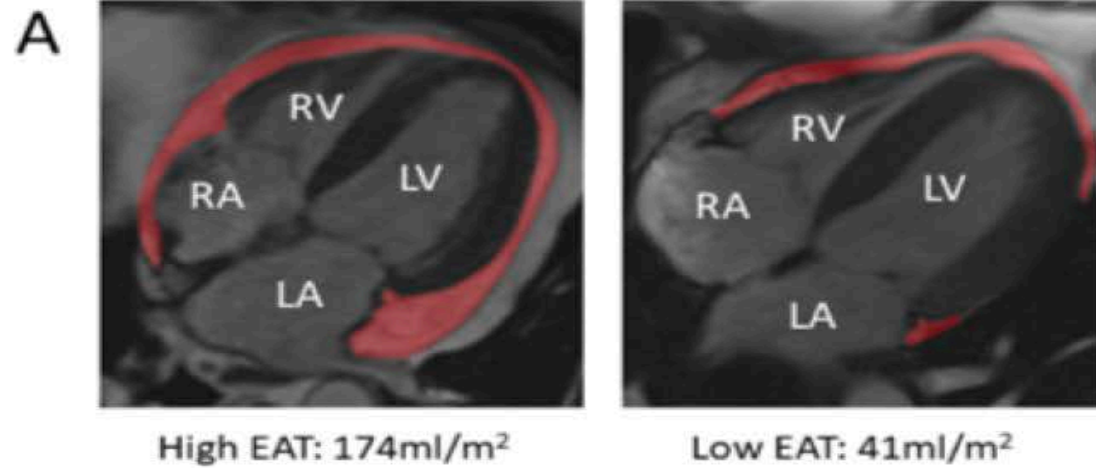
Survival by BMI



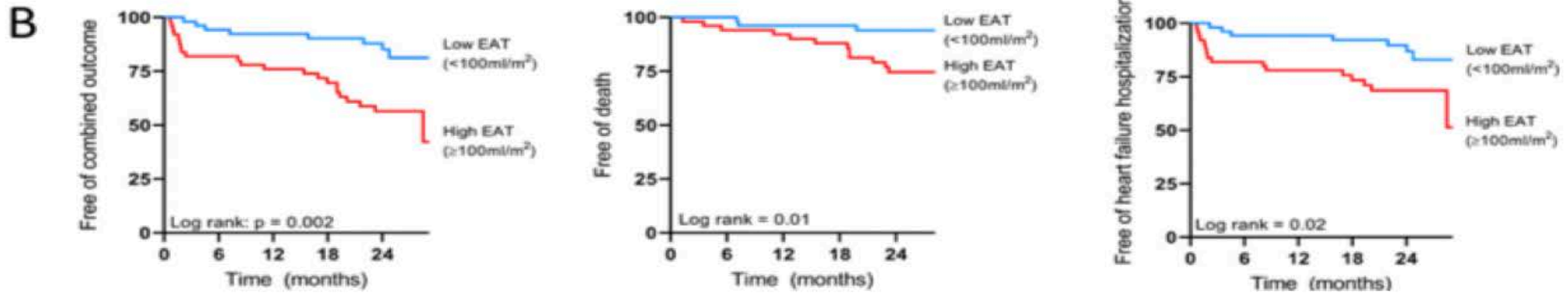
Survival by waist-to-hip ratio



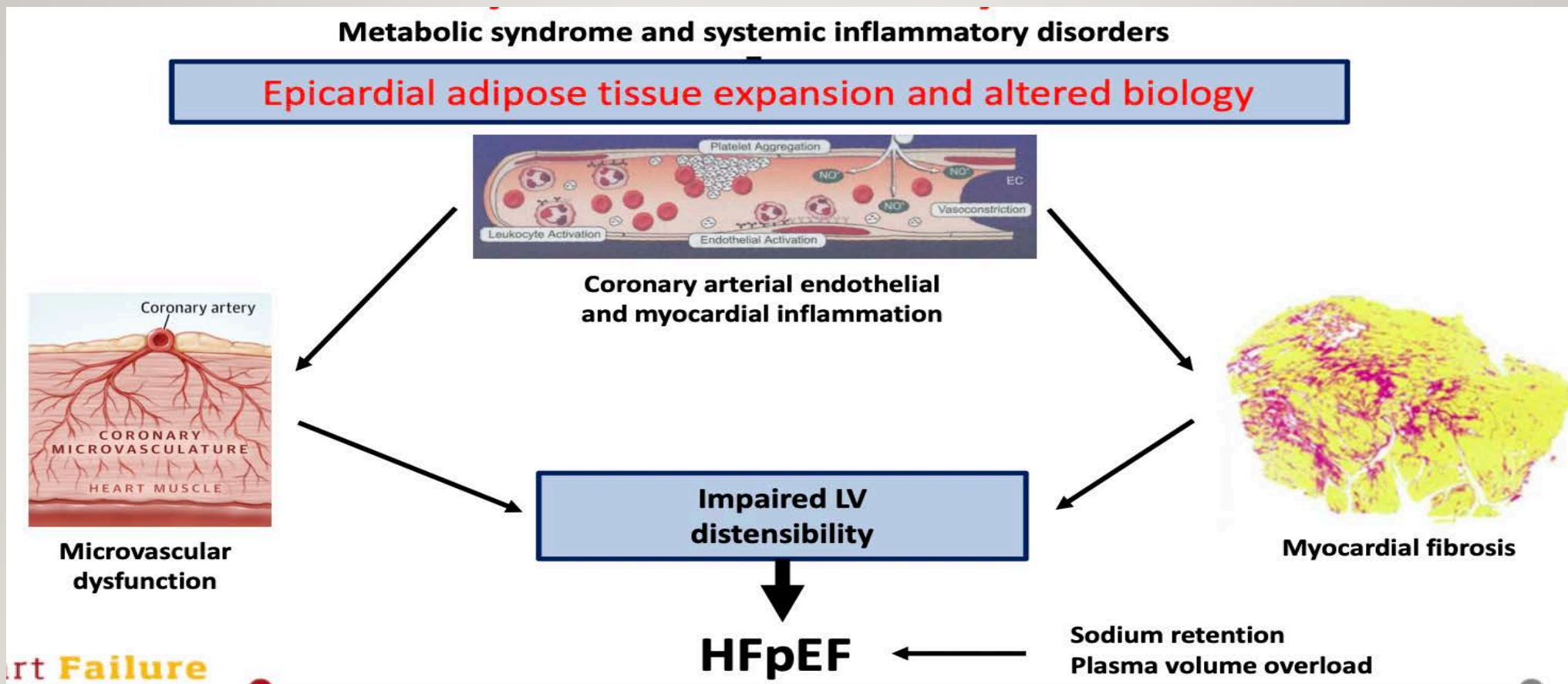
ΕΠΙΚΑΡΔΙΑΛ ΥΑΓΨ VƏ HFPEF PROGNOZU



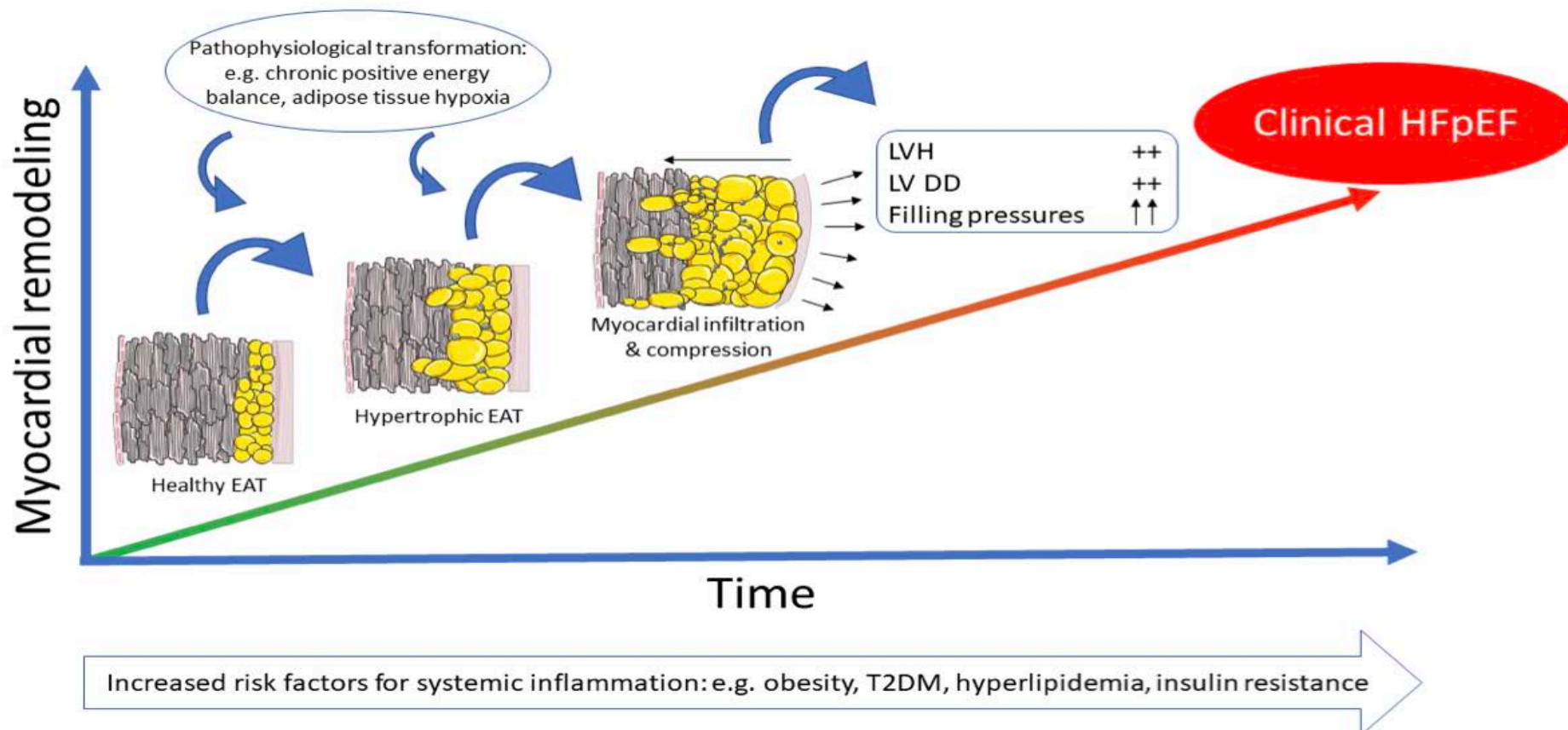
Independent of BMI



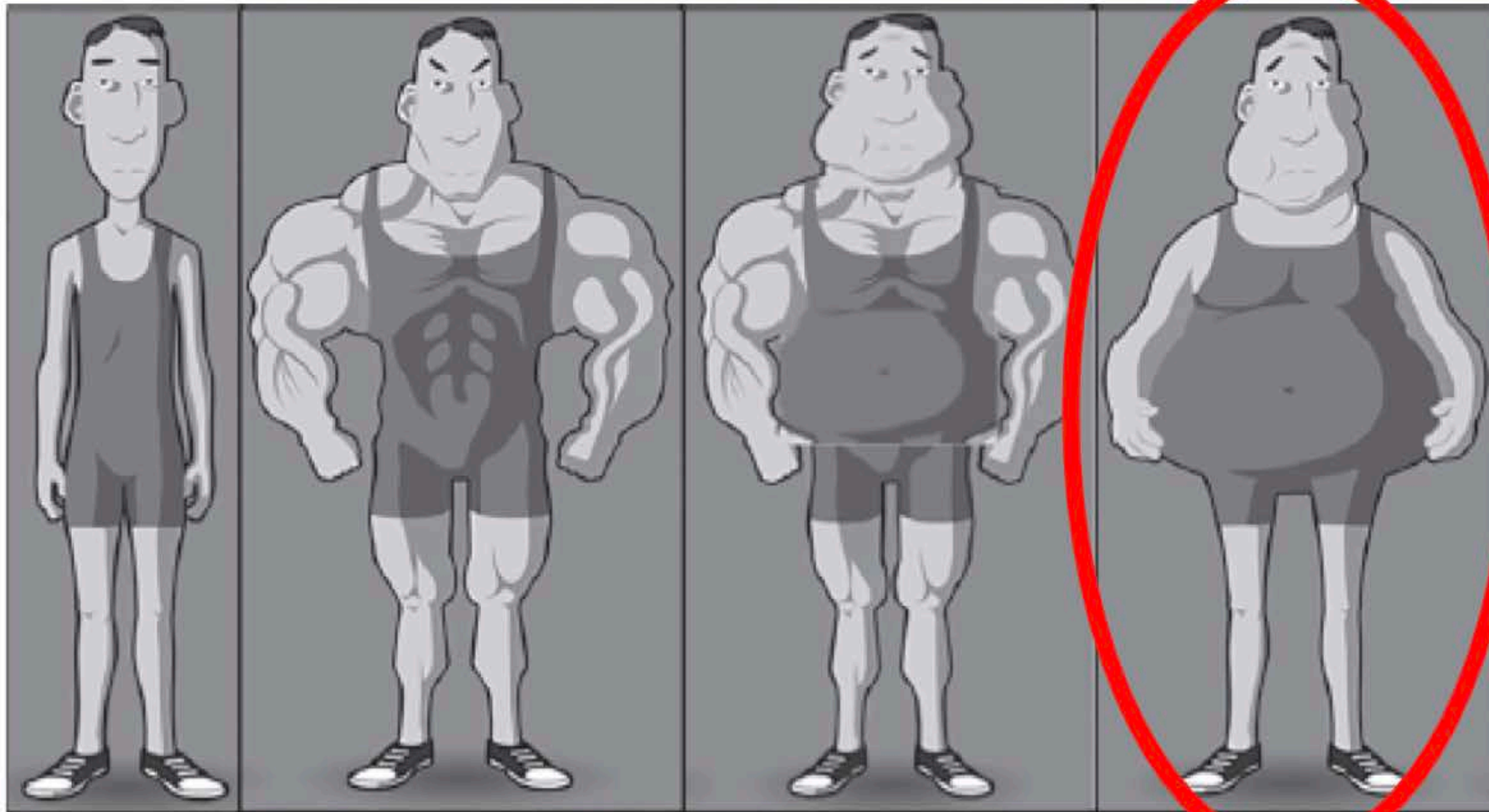
YENI HIPOTEZ- EPIKARDIAL YAĞ ILTIHABIN MIOKARDA TƏSİRİNİN ƏSAS TRANSDUSERIDİR.



Pathophysiological transformation of epicardial fat in response to chronic inflammatory diseases



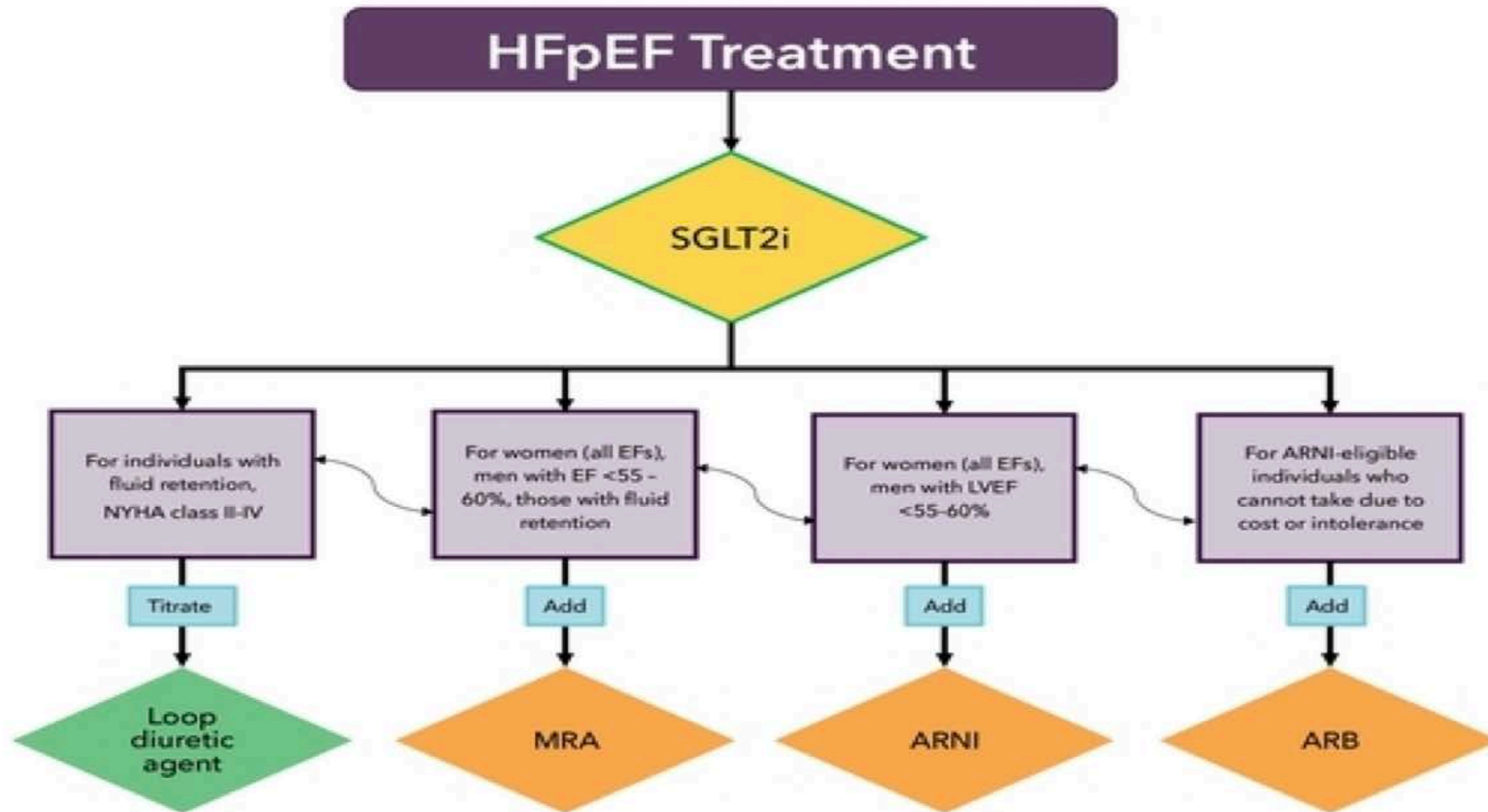
MÜALİCƏ TAKTIKASI



-Çəki azaldılması
Sağlam yaşam tərzi/dieta
Fərqudə olmaq/öyrətmək
Requlyar idman

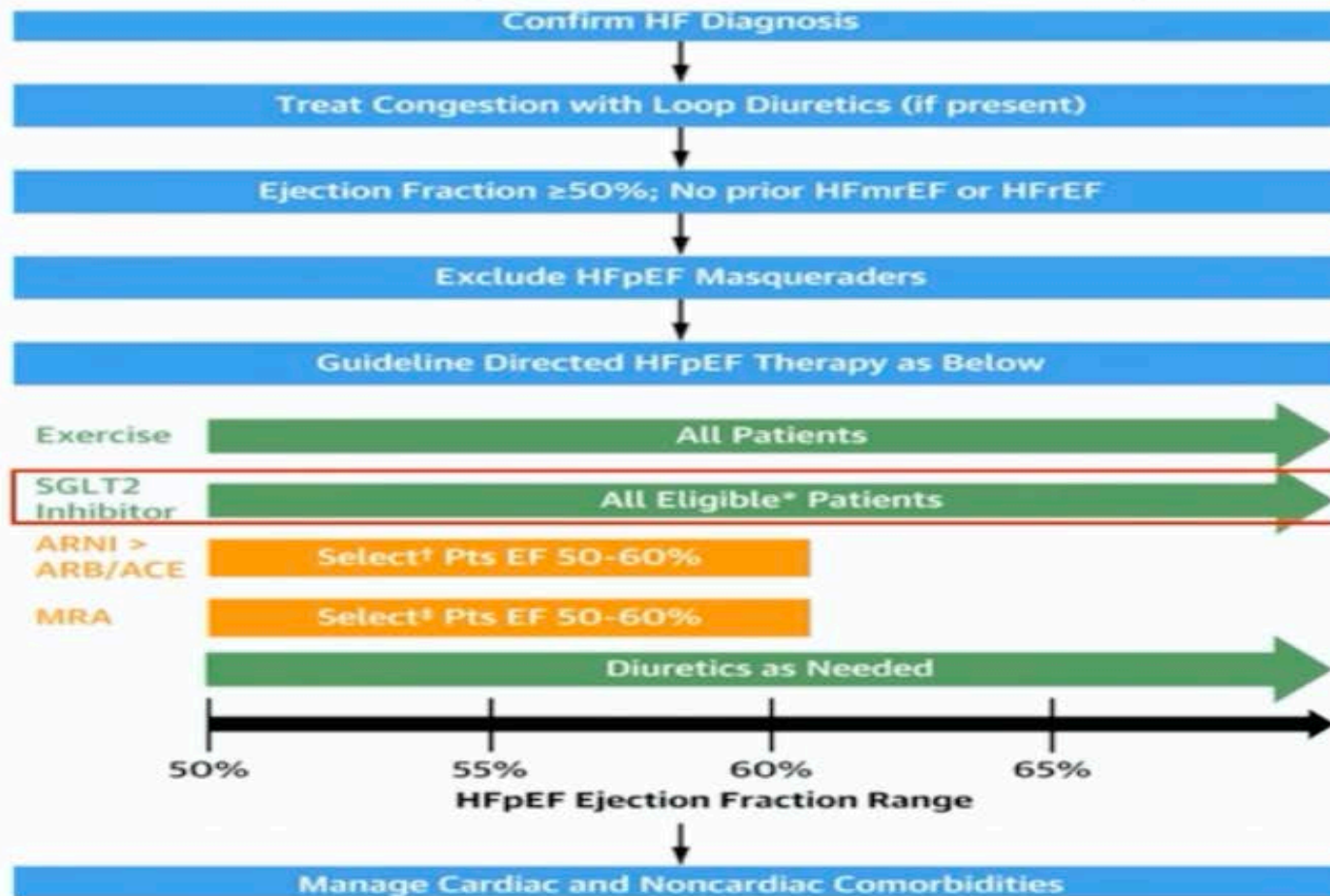
Bariatrik cərrahiyyə
SGLT2 inhibitorları
GLP-I agonistləri

2023 ACC Expert Consensus Decision Pathway on Management of Heart Failure With Preserved Ejection Fraction: A Report of the American College of Cardiology Solution Set Oversight Committee. Writing Committee, J Am Coll Cardiol. Apr 19, 2023.



How to Manage Heart Failure With Preserved Ejection Fraction: Practical Guidance for Clinicians

State-Of-The-Art Paper. J Am Coll Cardiol HF. May 03, 2023

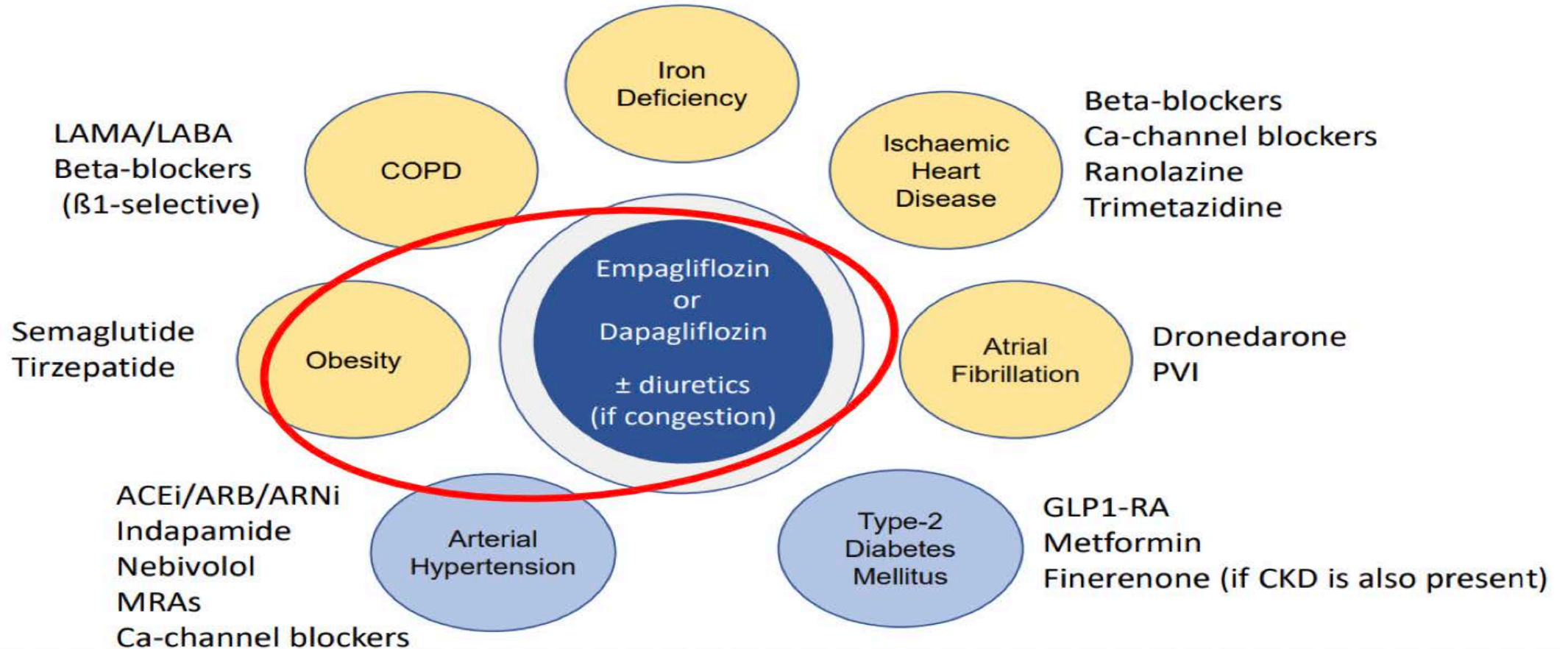


Əks göstəriş və əvvəlki istifadədən intolerans müşahidə edilməmişsə

Akshay S. Desai et al. J Am Coll Cardiol HF 2023;

Patient Phenotype Profiling in Heart Failure with Preserved Ejection Fraction to Guide Therapeutic Decision Making A Scientific Statement of the HFA, ERHA and ESH. (EJC-HF May 19,2023)

Ferric carboxymaltose

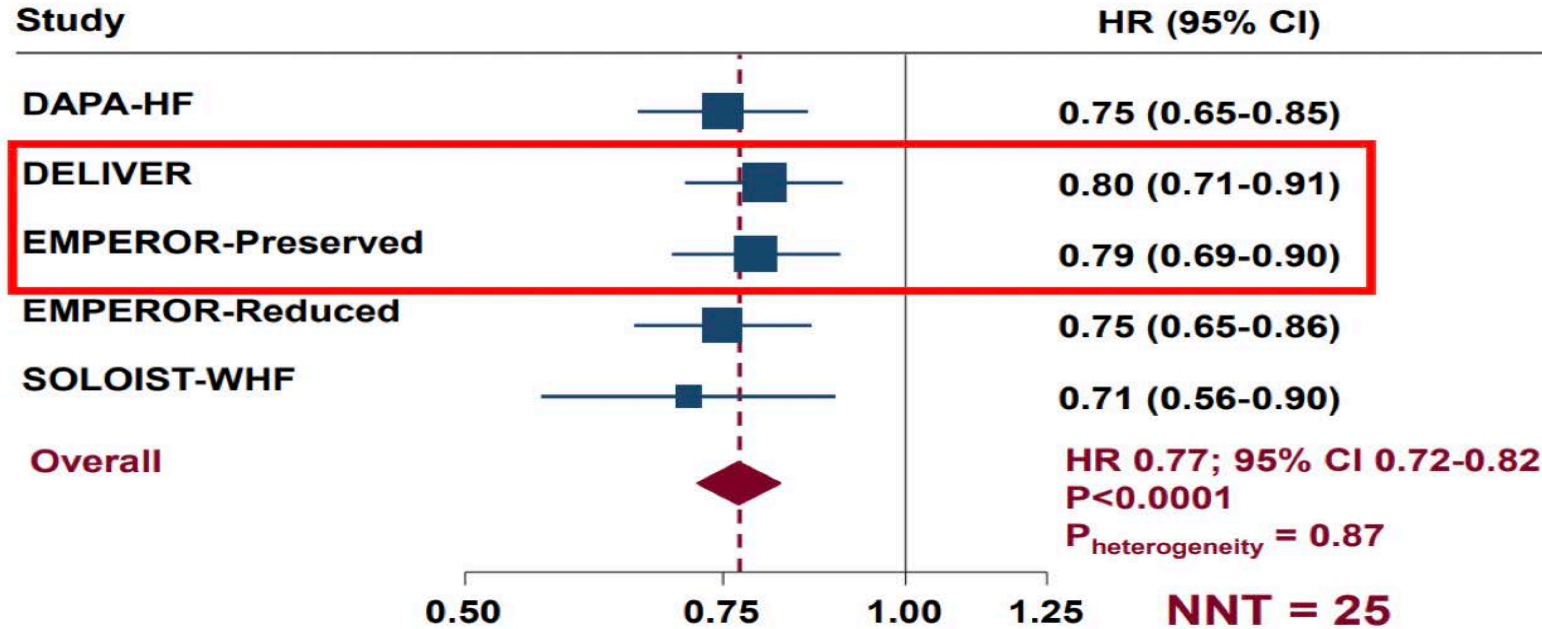


SGLT2 inhibitors in patients with heart failure: a comprehensive meta-analysis of five randomised controlled trials

•Muthiah Vaduganathan, Kieran F Docherty, Brian L Claggett, Pardeep S Jhund, Rudolf A de Boer, MD

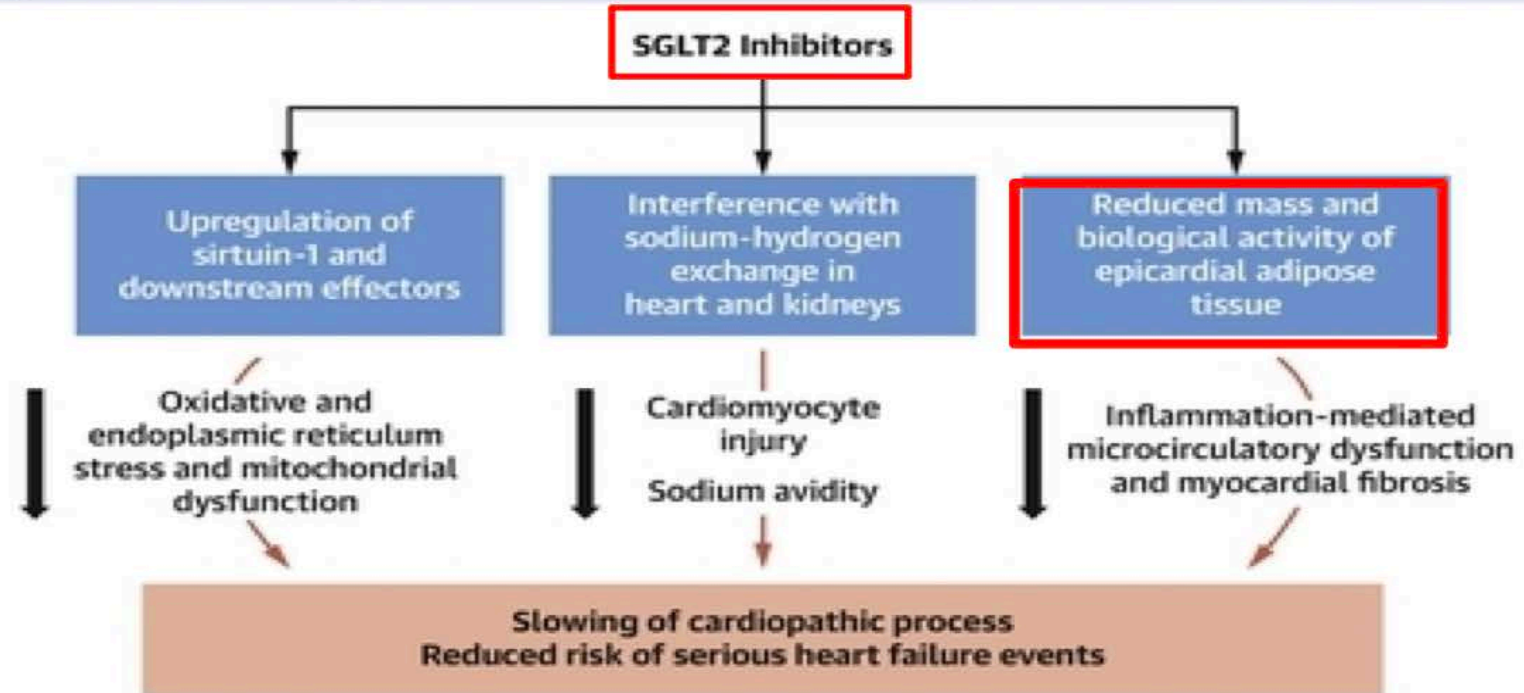
•Silvio E Inzucchi, Mikhail N Kosiborod, Carolyn S P Lam, Felipe Martinez, John J V McMurray, Scott Solomon.

•The Lancet. (2022) [https://doi.org/10.1016/S0140-6736\(22\)01429-5](https://doi.org/10.1016/S0140-6736(22)01429-5)



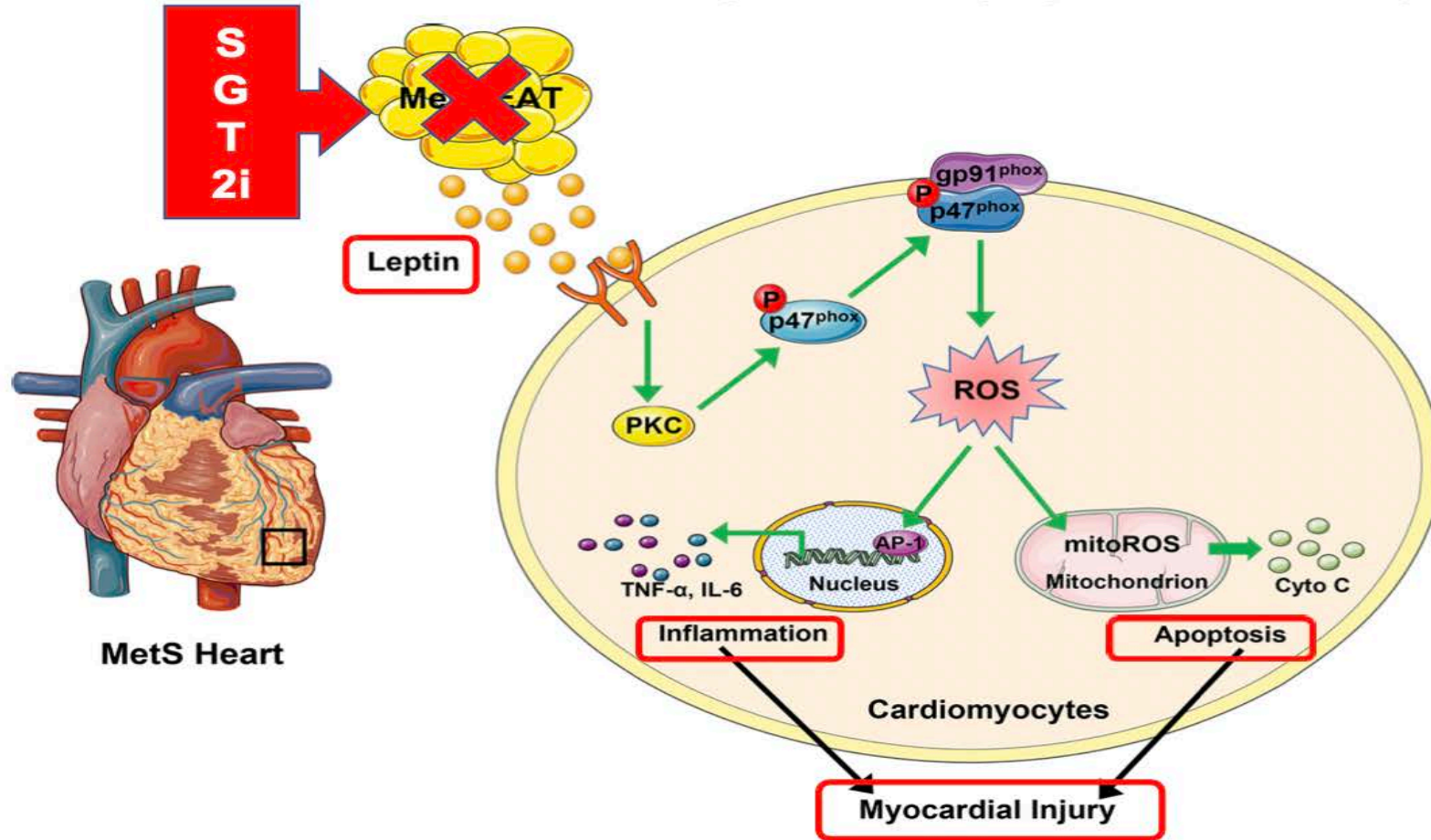
SGLT2 inhibitorları atım fraksiyasından asılı olmayaraq kardiovaskulyar ölüm və hospitalizasiyanı azaltmaqla ürək çatışmazlığı müalicəsində fundamental müalicə üsulu olduğunu göstərmişdir.

CENTRAL ILLUSTRATION: Sodium-Glucose Cotransporter 2 Inhibitors Interfere With the Principal Mechanisms by Which Diabetes Can Promote the Development and Progression of Cardiomyopathy

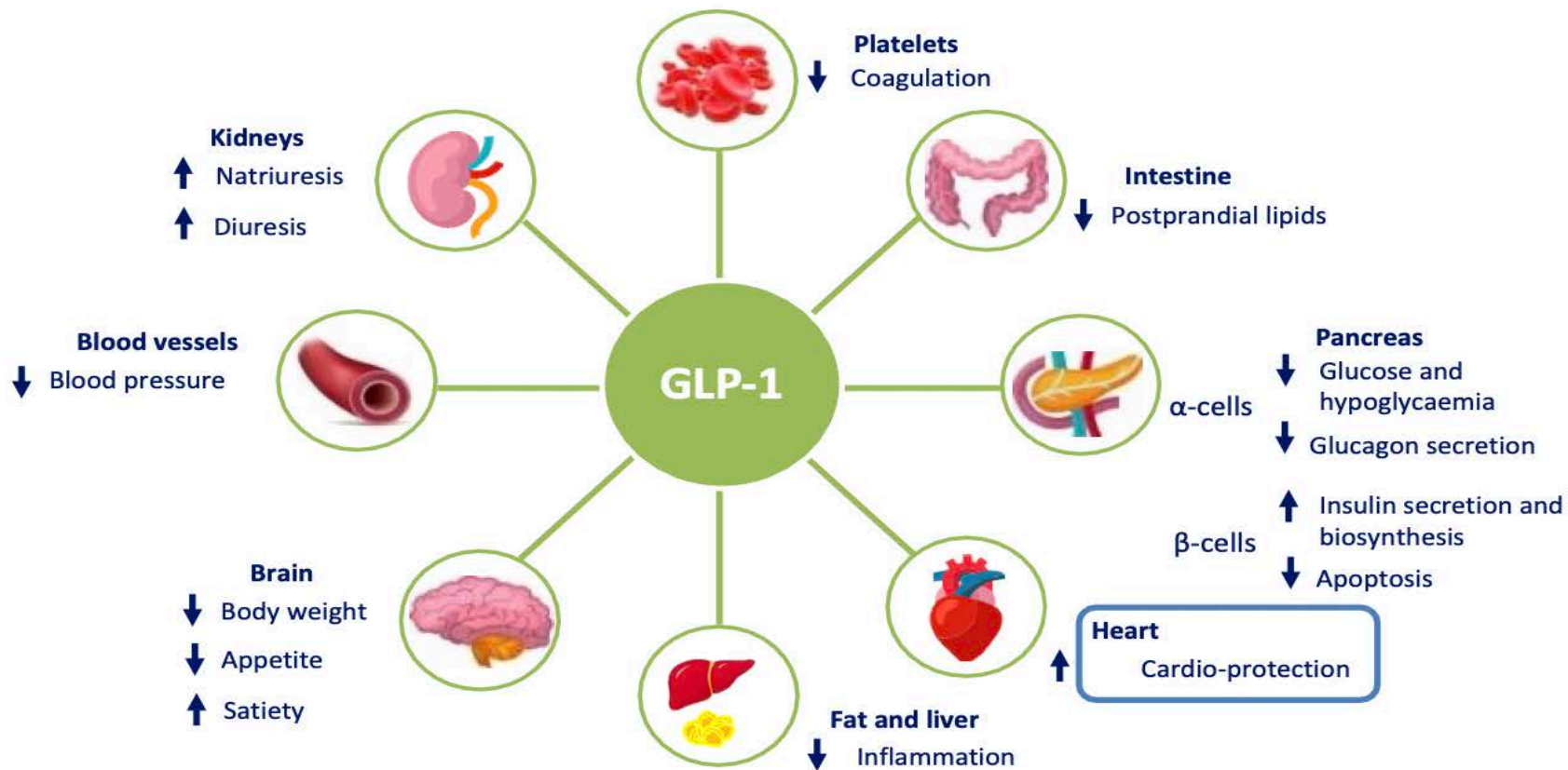


Packer, M. J Am Coll Cardiol HF. 2021;9(8):535-549.

Epicardial tissue derived leptin promotes myocardial injury in metabolic syndrome



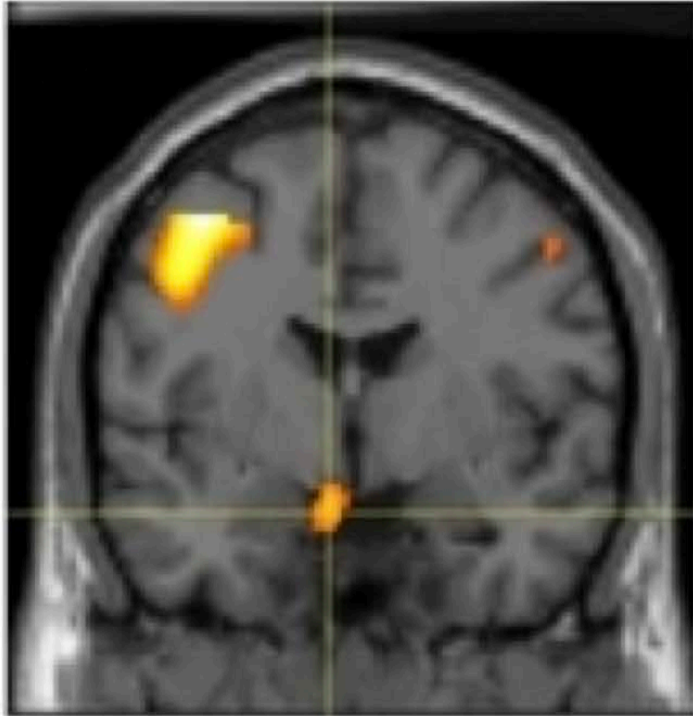
GLP-1 agonistlərinin əsas təsirləri



GLP-1, glucagon-like peptide

1. Wang XC et al. World J Gastroenterol 2014;20:14821–14830; 2. Lee J et al. Diabetes Metab J 2012;36:262–267; 3. Sharma S et al. PLoS One 2011;6:e25269

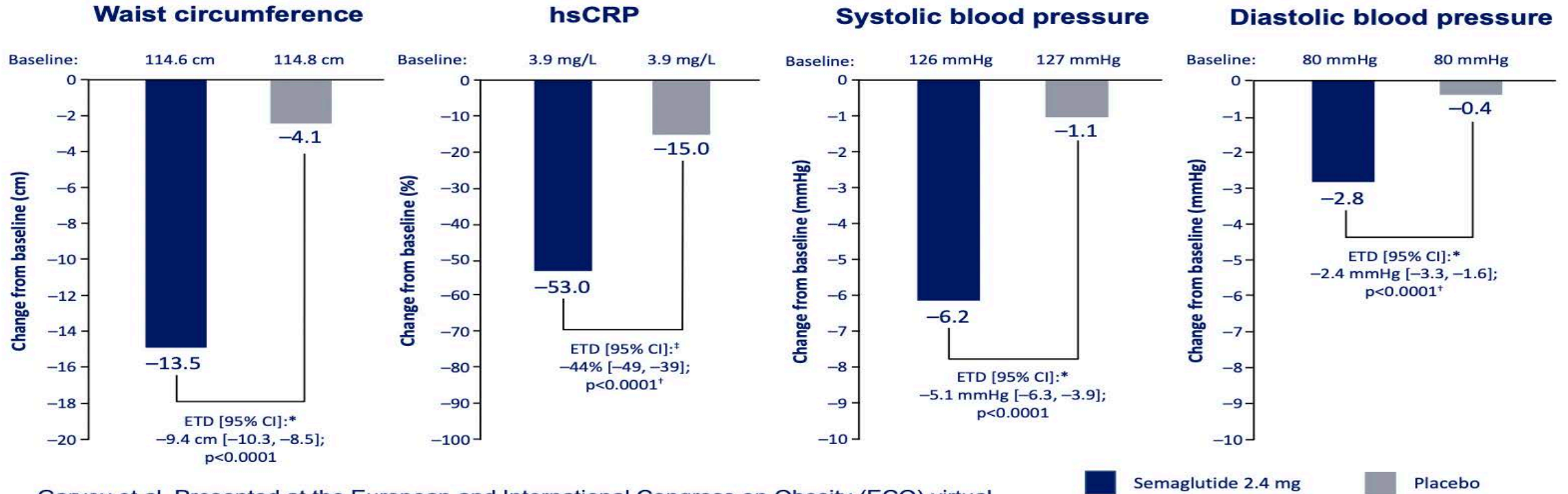
GLP-1 activates areas of brain involved in appetite regulation



- The postprandial GLP-1 response is associated with activation of areas of the human implicated in regulation of appetite and food intake
- Peak postprandial increases in plasma GLP-1 concentrations are correlated with increases in regional cerebral blood flow in the left dorsolateral prefrontal cortex and the hypothalamus

Semaglutide

Change in Cardiovascular risk factors STEP 1



Garvey et al. Presented at the European and International Congress on Obesity (ECO) virtual meeting. May 10–13, 2021

Practical use of oral semaglutide



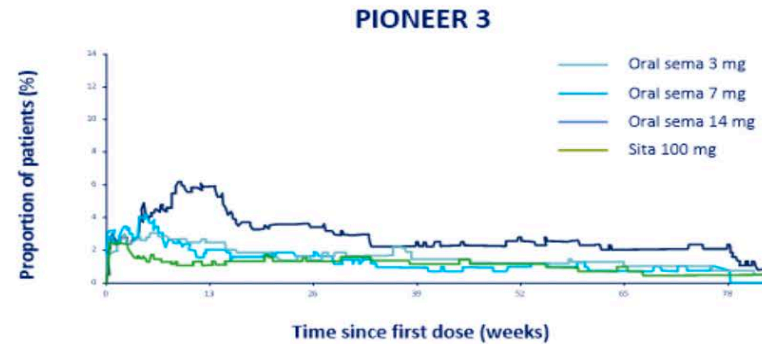
Dose escalation is recommended to mitigate gastrointestinal adverse events

The most frequently reported adverse reactions in clinical trials were gastrointestinal disorders, including

Nausea **Diarrhoea** **Vomiting**

Most events were mild to moderate and most frequently reported during the first months on treatment.

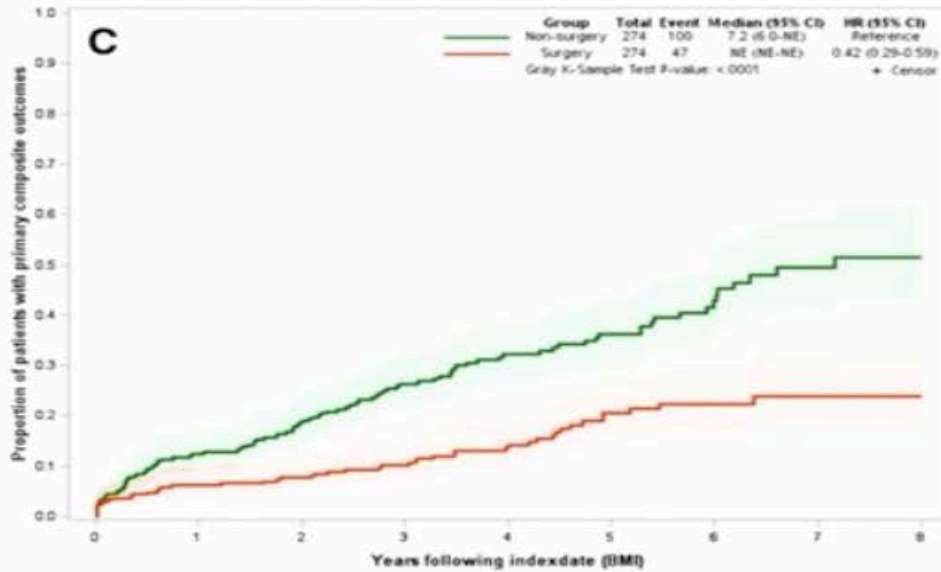
The most common gastrointestinal adverse event, nausea, is transient and generally reduces after dose escalation



Bariatric Surgery and Cardiovascular Outcomes in Patients With Obesity and Cardiovascular Disease:

A Population-Based Retrospective Cohort Study

MACE in HF patients



Bariatric cərrahiyyənin hemodinamik effektləri

1. Sol mədəcik atım yükünü azaldır
2. Sistolik qan təzyiqini azaldır
3. Sol mədəcik hipertofiyasını azaldır

Bariatric Surgery in Patients with Severe Heart Failure

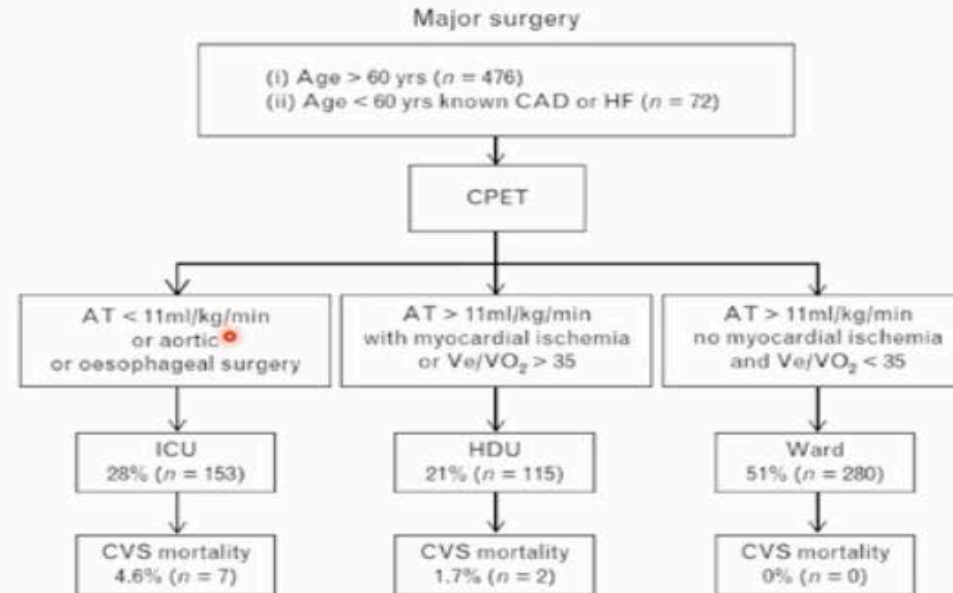
Tze Wei Wilson Yang^{1,2} • Yazmin Johari^{1,2} • Paul R Burton^{1,2} • Arul Earnest³ • Kalai Shaw^{1,2} • James L Hare⁴ • Wendy A Brown^{1,2}

Ağır ÜÇ olan xəstələrdə bariatrik cərrahiyyə çox effektiv və təhlükəsizdir
Amma

Xəstə seçimi hər zaman önəmlidir

Rationale for cardiopulmonary exercise test in the assessment of surgical risk

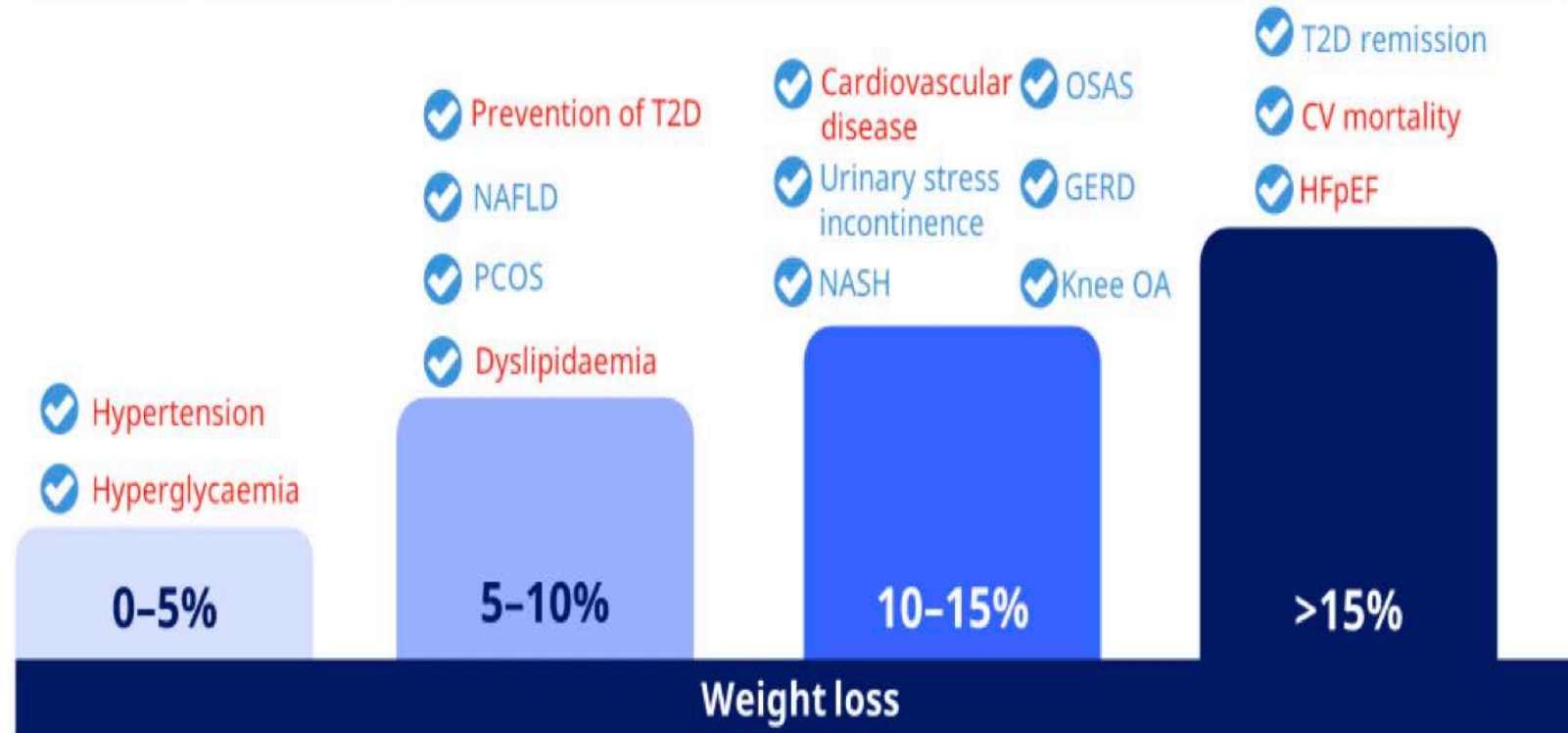
Annamaria Iorio^{a,b}, Damiano Magri^c, Stefania Paolillo^{b,d}, Elisabetta Salvioni^b, Andrea Di Lenarda^e, Gianfranco Sinagra^a, Piergiuseppe Agostoni^{b,f,g} and Susanna Sciomer^h



Flow chart showing postoperative triage site and outcome following major surgery. AT, anaerobic threshold; CAD, coronary artery disease; CPET, cardiopulmonary exercise testing; CVS, cardiovascular system; HDU, high dependency unit; HF, heart failure. Reproduced from reference.¹⁵

Çəki azaldılmasının ağırlaşmalara təsiri

Towards greater weight loss and overall health improvement



Təkbəşinə çəki azaldılması kifayət etmir



COR	LOE	RECOMMENDATIONS
1	A	1. For patients with HF who are able to participate, exercise training (or regular physical activity) is recommended to improve functional status, exercise performance, and QOL (1-9).
2a	B-NR	2. In patients with HF, a cardiac rehabilitation program can be useful to improve functional capacity, exercise tolerance, and health-related QOL (1,2,5,6,8).



Recommendations	Class ^a	Level ^b
Exercise is recommended for all patients who are able in order to improve exercise capacity, QOL, and reduce HF hospitalization. ^{c 324–328,335–337}	I	A
A supervised, exercise-based, cardiac rehabilitation programme should be considered in patients with more severe disease, frailty, or with comorbidities. ^{95,324–327,338}	IIa	C

©ESC 2021

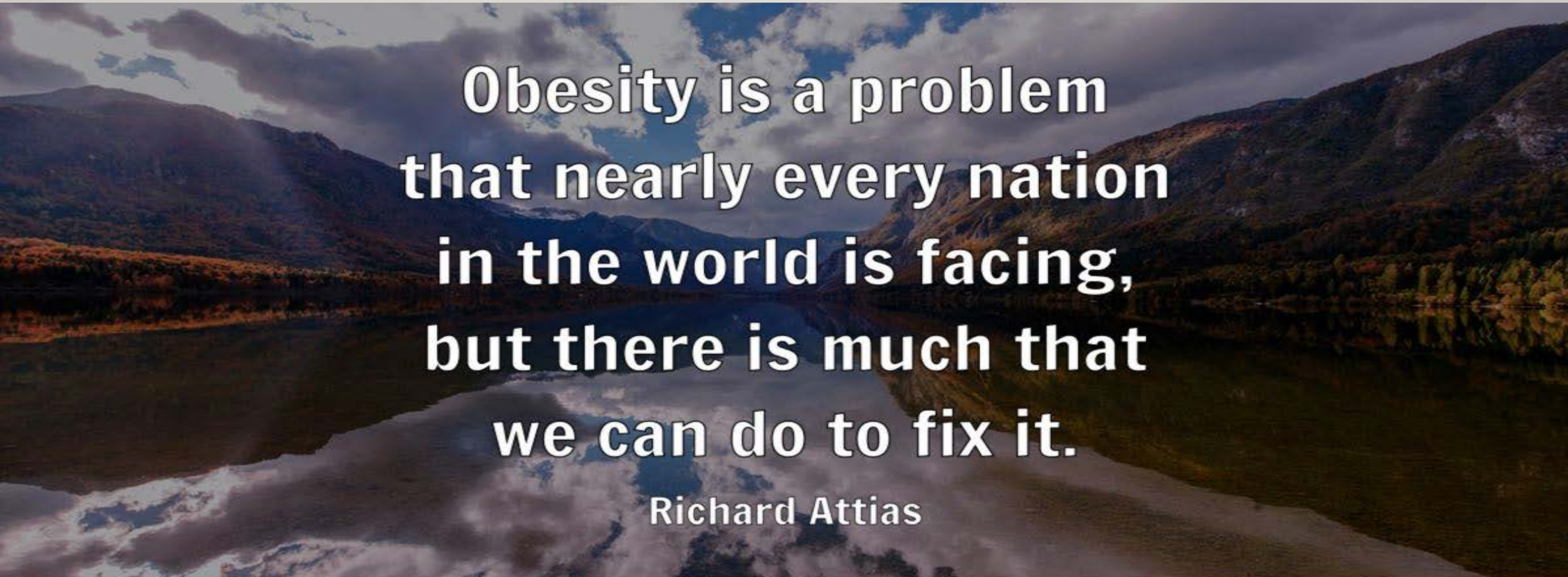
EVƏ APARILACAQ MESAJLAR....

- Piylənmə global epidemik vəziyyətdir
- HFPEF-in əsas səbənlərindən biridir və 50% HFPEF xəstələri obezdir
- BKİ-nə deyil, visseral yağ miqdarına fokuslanmaq lazımdır
- Daha çox visseral yağ miqdarına malik xəstələrin proqnozu daha pisdır
- Bel çevrəsi, bel-qalça nisbəti və abdominal KT göstəricilərindən istifadə etmək daha rahatdır

Piylənmə dəyişdirilə bilən çox əhəmiyyətli risk faktorudur- öyrət və müalicə et

Araşdırılmalıdır

- Epikardial yağ HFPEF üçün həqiqətən əhəmiyyətli faktordu?
- Epikardial yağ miqdarını azaltmaq xəstələrə fayda verərmə?



**Obesity is a problem
that nearly every nation
in the world is facing,
but there is much that
we can do to fix it.**

Richard Attias

BrainyQuote®

Diqqətinizə görə təşəkkürlər!